EAST - [~defaultmine.wsp:1]

File View Edit Tools Window Help

- Drafts
- Pending
- Active
  - L1: (91) polyimide same (coating or coated) same (iol or intraocular lens)
  - L2: (60) polyimide with (coating or coated) same (iol or intraocular lens)
  - L3: (0) polyimide with (coating or coated) same (iol or intraocular)
  - L4: (9) polyimide with (coating or coated) and (iol or intraocular)
  - L5: (202) polyimide with (coating or coated) and (implant or prosthe$)
- Failed
- Saved
  - (3311) (604/281 OR 606/155 OR 623/1 OR 606/153 OR 606/195 OR 604/104 OR 606/191 OR 60
  - (4647) (("623/11") or ("623/8") or ("623/12") or ("623/17") or ("623/925") or ("623/9
  - (78808) (etch or etching or etched) same (electrode or capacitor)
  - (53638) (etch or etching or etched) with (electrode or capacitor)
- Favorites
- Tagged
- UDC
- Queue
- Trash

Browse Queue Clear

DBs: USPAT; EPO; JPO; Derwent

Default operator: OR

Plurals Synonyms

Highlight all hit terms initially

polyimide with (coating or coated) and (implant or prosthe$)

BRS form IS&R form Image Text

	Search Terms	Total	USPAT	USOCR	EPO	JPO	Derwent
1	COATED.D763,D570,D575,D380,D283,D285,D287,D289,D291,D193,D194,D195,D196,D197,D198,D199	790422					
2	COATEDS.D763,D570,D575,D380,D283,D285,D287,D289,D291,D193,D194,D195,D196,D197,D198,D19	4					
3	COATING.D763,D570,D575,D380,D283,D285,D287,D289,D291,D193,D194,D195,D196,D197,D198,D19	1011188					
4	COATINGS.D763,D570,D575,D380,D283,D285,D287,D289,D291,D193,D194,D195,D196,D197,D198,D1	204601					
5	IMPLANT.D763,D570,D575,D380,D283,D285,D287,D289,D291,D193,D194,D195,D196,D197,D198,D19	60286					
6	IMPLANTS.D763,D570,D575,D380,D283,D285,D287,D289,D291,D193,D194,D195,D196,D197,D198,D1	23283					
7	POLYIMIDE.D763,D570,D575,D380,D283,D285,D287,D289,D291,D193,D194,D195,D196,D197,D198,D	76383					
8	POLYIMIDES.D763,D570,D575,D380,D283,D285,D287,D289,D291,D193,D194,D195,D196,D197,D198,	16542					
9	PROSTHE.D763,D570,D575,D380,D283,D285,D287,D289,D291,D193,D194,D195,D196,D197,D198,D19	4					
10	PROSTHECAE.D763,D570,D575,D380,D283,D285,D287,D289,D291,D193,D194,D195,D196,D197,D198,	3					
11	PROSTHECATE.D763,D570,D575,D380,D283,D285,D287,D289,D291,D193,D194,D195,D196,D197,D198	3					
12	PROSTHECOCHLIS.D763,D570,D575,D380,D283,D285,D287,D289,D291,D193,D194,D195,D196,D197,D	1					
13	PROSTHECOCHLORIS.D763,D570,D575,D380,D283,D285,D287,D289,D291,D193,D194,D195,D196,D197	5					
14	PROSTHECOLORIS.D763,D570,D575,D380,D283,D285,D287,D289,D291,D193,D194,D195,D196,D197,D	1					
15	PROSTHECOMICRO.D763,D570,D575,D380,D283,D285,D287,D289,D291,D193,D194,D195,D196,D197,D	1					
16	PROSTHECOMICROBIUM.D763,D570,D575,D380,D283,D285,D287,D289,D291,D193,D194,D195,D196,D1	2					
17	PROSTHECTIC.D763,D570,D575,D380,D283,D285,D287,D289,D291,D193,D194,D195,D196,D197,D198	2					
18	PROSTHEDENT.D763,D570,D575,D380,D283,D285,D287,D289,D291,D193,D194,D195,D196,D197,D198	1					

Hits Details

Ready NUM

EAST 1/11/01

EAST Browser - L4: (9) ((IOL OR INT... | US 6033562 A | Tag: U | Doc: 3/9 (SORTED) | Format: KWIC

File Edit View Tools Window Help

	Document ID	K	Sourc	Issue Da	Pa	
1	US 6156576		USPAT	20001205	18	F
2	US 6099454		USPAT	20000808	18	P
	US 6033582		USPAT	20000307	18	[illegible]
4	US 5951458		USPAT	19990914	24	L
5	US 5855546		USPAT	19990105	23	P
6	US 5637772		USPAT	19970610	20	F
7	US 5260352		USPAT	19931109	6	O
8	US 5049156		USPAT	19910917	14	I
9	US 5019210		USPAT	19910528	7	M

DOCUMENT-IDENTIFIER: US 6033582 A
TITLE: Surface modification of medical implants

BSPR:
Many plasma treatment techniques, for polymers in particular, use cold plasmas to activate the surface by plasma-induced polymerization and/or RF plasma treatment to break surface polymer bonds. This action generates ions and free radicals, setting up favorable conditions for subsequent RF plasma-induced polymerization and grafting of monomers to the substrate surface as described in U.S. Pat. No. 5,080,924; incorporated herein by reference. In another application, similar covalent bonding of polymeric biocompatible materials onto intraocular lenses via RF plasma grafting was successfully achieved, creating a microscopically smooth surface as described in U.S. Pat. No. 5,260,093; herein incorporated in reference.

DEPR:
As previously stated, the inventive method enhances medical implant surfaces by improving the adhesion characteristics of the substrate, which in turn provides for better coating uniformity and thickness of biocompatible polymeric materials because the invention roughens and changes the micro-morphological configurations of the surface. Some of the immobilized polymeric coatings that can be used include: polyolefins, polyamides, polyimides, polyethers, polyesters, polystyrenes, polyvinyl chlorides, polypropylenes, polyisoprenes, polytetrafluoroethylenes, polyurethanes, polycarbonates, polyalkylimines (in combination with cross-linking agents: glutaraldehyde, glyoxal, malonaldehyde, succinaldehyde, adipaldehyde, or dialdehyde starch). U.S. Pat. No. 5,415,938 and U.S. Pat. No. 5,415,938, herein incorporated by reference, identify some of the existing art used to polymer coat medical implant devices.

EAST Browser - L4: (9) ((IOL OR INT... | US 5260352 A | Tag: U | Doc: 7/9 (SORTED) | Format : KWIC

File Edit View Tools Window Help

	Document ID	K	Source	Issue Da	Pa	
1	US 6156576		USPAT	20001205	18	F
2	US 6099454		USPAT	20000808	18	P
3	US 6033582		USPAT	20000307	18	S
4	US 5951458		USPAT	19990914	24	L
5	US 5855546		USPAT	19990105	23	P
6	US 5637772		USPAT	19970610	20	F
	US 5260352		USPAT	19931109	[illegible]	L
8	US 5049156		USPAT	19910917	14	I
9	US 5019210		USPAT	19910528	7	M

DOCUMENT-IDENTIFIER: US 5260352 A
TITLE: Ocular lens material

BSPR:
The present invention relates to an ocular lens material. More particularly, it relates to an ocular lens material excellent in the oxygen permeability and heat resistance and useful for e.g. contact lenses or intraocular lenses.

BSPR:
Further, intraocular lenses are required to have adequate heat resistance to be durable against heating at the time of high pressure steam sterilization applied thereto prior to its intraocular insertion, as one of important requirements.

BSPR:
Under these circumstances, the present inventors have conducted extensive researches to develop an ocular lens material excellent particularly in the oxygen permeability and heat resistance while maintaining good transparency in view of the prior art. As a result, they have found an ocular lens material which is provided with both excellent oxygen permeability required for contact lenses and excellent heat resistance required for intraocular lenses simultaneously in good balance and which at the same time is excellent in the transparency. The present invention has been accomplished on the basis of this discovery.

BSPR:
As another method for forming the above polyimide film, there may, for example, be mentioned a method which comprises casting the above polyamide acid solution on a glass plate, heating it at a temperature of from 100 to 150.degree. C. for from 30 to 120 minutes to form a coating film, immersing this coating film in e.g. a benzene solution of pyridine and acetic anhydride to remove the solvent and to conduct the imidation so that the coating film will be converted to a polyimide film.

BSPR:
In the above first to third methods, as a method for preparing an ocular lens

EAST Browser - L4: (9) ((IOL OR INT... | US 5019210 A | Tag: S,T1 | Doc: 9/9 (SORTED) | Format : KWIC

File Edit View Tools Window Help

	Document ID	K	Source	Issue Da	Pa
1	US 6156576		USPAT	20001205	18 F
2	US 6099454		USPAT	20000808	18 P
3	US 6033582		USPAT	20000307	18 S
4	US 5951458		USPAT	19990914	24 L
5	US 5855546		USPAT	19990105	23 P
6	US 5637772		USPAT	19970610	20 F
7	US 5260352		USPAT	19931109	6 O
8	US 5049156		USPAT	19910917	14 I
	US 5019210		USPAT	[illegible]	[illegible]

DOCUMENT-IDENTIFIER: US 5019210 A
TITLE: Method for enhancing the adhesion of polymer surfaces by water vapor plasma treatment

BSPR:
U.S. Pat. No. 4,740,282 describes a treatment for a synthetic plastic intraocular lense to avoid protein adhesion to the lens. The lens is treated
by first cross-linking the lens surface by treating the surface with a stream

of low pressure hydrogen gas in the presence of an A.C. electrical discharge,

and thereafter treating the cross-linked surface with hydroxyl radicals to hydrophilize the surface.

DEPR:
E-beam evaporate 500 angstroms of Cr onto an Si wafer. Spin coat, pre-bake, and 400.degree. C. cure RC5878 (PMDA-ODA manufactured by DuPont) polyimide (5.5.multidot.0.7 microns thick). Liquid polymer is spin coated onto the chrome layer. The chrome layer acts as an adhesion layer. E-beam evaporate a
2.5 micron thick Cu release dam to facilitate peel testing later. The wafers

were split into control samples and samples for water vapor plasma treatment.

Plasma conditions were 50 Watt, 175 millitorr and 25.degree. C. electrode temperature. The samples are recombined and three layers of PMDA-ODA spin coated onto the previously deposited polyimide layer. The newly deposited liquid polyimide precursor is prebaked at 100.degree. C. for five minutes between layers. At 100.degree. C. for twenty hours after the last layer is deposited. Then the structure is cured at 400.degree. C. for between 30 minutes to 1 hour. The thickness of the 5 mm peel lines was 16.2.+-.2.1 microns thick. Five (5) millimeter wide lines are cut in the second polyimide
layer. Ninety degree peel tests using stroke control at a rate of 4.55 mm/min.
were performed. The control sample's peel strength was measured as 5.+-.1 grams/mm and the water vapor plasma treated sample's peel strength was measured
as 90.+-.8 grams/mm. The water contact angles, measured as previously described, for 400.degree. C. cured RC5878 are 65.degree..+-.3.degree. advancing and 45.degree..+-.3.degree. receding, for the control; and 12.+-.2

degrees advancing and 3.degree..+-.2.degree. receding for the water vapor plasma treated sample.

Document ID	K	Source	Issue Date	Pa
74 US 5726693		USPAT	19980310	16 Ir
75 US 5691089		USPAT	19971125	20 Ir
76 US 5677041		USPAT	19971014	19 Ir
77 US 5672577		USPAT	19970930	20 Cl
78 US 5665116		USPAT	19970909	9 Me
79 US 5665995		USPAT	19970909	12 Pc
80 US 5654203		USPAT	19970805	11 Me
81 US 5654811		USPAT	19970805	76 Cc
82 US 5643826		USPAT	19970701	26 Me
83 US 5637772		USPAT	19970610	20 Fl
84 US 5629186		USPAT	19970513	20 Pc
85 US 5625637		USPAT	19970429	20 Su
86 US 5618299		USPAT	19970408	19 Re
87 US 5618760		USPAT	19970408	35 Me
88 US 5612250		USPAT	19970318	19 Me
89 US 5609629		USPAT	19970311	12 Cc
90 US 5595942		USPAT	19970121	11 Me
91 US 5593852		USPAT	19970114	20 Su
92 JP 09008035	A	DERWE	19970110	4 Ci
93 US 5587095		USPAT	19961224	7 Pr
94 US 5556413		USPAT	19960917	19 Cc
95 US 5550078		USPAT	19960827	15 Re
96 US 5550351		USPAT	19960827	7 Pr
97 US 5543182		USPAT	19960806	14 Se
98 US 5543352		USPAT	19960806	17 Me
99 US 5524338		USPAT	19960611	16 Me
100 US 5515848		USPAT	19960514	18 Im
101 US 5496581		USPAT	19960305	16 Pc
102 US 5490909		USPAT	19960213	18 Us
103 US 5483822		USPAT	19960116	11 Ce
104 US 5482566		USPAT	19960109	19 Me
105 US 5471033		USPAT	19951128	7 Pr
106 US 5451804		USPAT	19950919	7 VI
107 US 5441515		USPAT	19950815	20 Re
108 US 5431793		USPAT	19950711	13 Qu
109 US 5429974		USPAT	19950704	13 Pc
110 US 5428102		USPAT	19950627	6 Lc
111 US 5421989		USPAT	19950606	11 Pr
US 5403700		USPAT	19950404	9

DOCUMENT-IDENTIFIER: US 5403700 A
TITLE: Method of making a thin film electrical component

BSPR:
Yet another feature of the present invention is the provision of a polymer insulation layer with a relatively low cure temperature. Without metal interdiffusion considerations, a logical choice for this insulation layer might be a photoimageable polyimide because the layer can be patterned without the use of additional photoresist steps. Unfortunately, currently available photoimageable polyimides require a high-cure temperature (450.degree. C.) to drive out the photosensitizers. In the preferred embodiment, a BTDA-ODA polyimide is used, with positive photoresist, to form the patterned insulation coating . This material can be cured as low as 250.degree. C., causing significantly less interdiffusion and resulting problems.

BSPR:
Also according to the present invention, a method is provided of making a thin film electrical component. The method comprises the steps of providing a rigid glass carrier plate having a flat surface, coating the flat surface with a first polyamic acid precursor solution, and curing the first polyamic acid precursor solution using heat at a first temperature to provide a layer of polyimide film bonded to the flat surface. In a preferred embodiment of the present invention, the polyimide film has a coefficient of thermal expansion that is substantially equivalent to the coefficient of thermal expansion of the rigid glass carrier plate so that creation of internal stresses in the polyimide film during curing is avoided. In certain other embodiments, glass carrier plates and polyimide films having substantially different coefficients of thermal expansion can be used.

BSPR:
An electrical circuit is provided in the thin film electrical component by depositing a first adhesive metal layer on the polyimide film, a noble metal layer on the first adhesive metal layer, and a second adhesive metal layer on the noble metal layer to sandwich the noble metal layer between the first and second adhesive metal layers, and patterning the deposited noble metal layer and first and second adhesive metal layers to define means on the polyimide film for providing an electrical circuit. Next, a second polyamic acid precursor solution is provided on the means for providing an electrical circuit